

Work Order ID 48362

Friday, June 26, 2009 11:42:30 AM



Page 1

Item ID: D3471-1

Accept



Setup Start



Revision ID: A

Stop



Item Name: Base

Start Date: 7/15/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

[Signature]

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3471

Rev A

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

Cut as per Dwg D3471 ☐ Dwg Rev: A ☐ Prog Rev: A

13 9 - 7 - 2

(4)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

13 9 - 7 - 2

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control






27 809167/06 (4) 6

Work Order ID 48362

Friday, June 26, 2009 11:42:30 AM








Page 3

Item ID: D3471-1 Accept  Setup Start 
Revision ID: A Stop 
Item Name: Base
Start Date: 7/15/2009 Start Qty: 4.00  Cust Item ID:
Required Date: 8/3/2009 Req'd Qty: 4.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start 
Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  QC Quality Control	QC3- Inspect Part Finish Memo 	0.00 0.00							
			09-09-15						
170  Packaging Packaging	Identify as per dwg & Stock Location: 159 Memo	0.00 0.00							
									9/7/15 (40) 80
180  QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							
									09/07/16  mf 09-07-16

Date: Wednesday, 03/06/2009 10:49:05 AM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BLOWER MOTOR SUPPORT
Job Number	: 48362		
Estimate Number	: 12308		
P.O. Number	:	Part Number	: D34711
This Issue	: 03/06/2009	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3471 REV.A
First Issue	: / /	Project Number	: N/A
Previous Run	: 34413	Drawing Revision	: A
	Type	Material	:
	: SMALL /MED FAB	Due Date	: 22/06/2009
Written By	:	Qty:	4
Checked & Approved By	: <u>JUD 09.06.03</u>	Um:	Each
Comment	: est rev A 06.03.02 New issue EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M2024T3S063	2024-T3 .063 sheet
-----	-------------	--------------------



Comment: Qty.: 1.1428 sf(s)/Unit Total: 4.5713 sf(s)

2024-T3 .063 sheet

Batch: 11787

IB 9-7-2

IB 9-7-2

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

Cut as per Dwg D3471

Dwg Rev: A

Prog Rev: A

IB 9-7-2

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

8016206 (48)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr

IB 9-7-2

2-Bend as per dwg D3471

503 09/02/15

(4)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 03/06/2009 10:49:05 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLOWER MOTOR SUPPORT

Job Number: 48362

Part Number: D34711

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

509/07/15 (K4)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

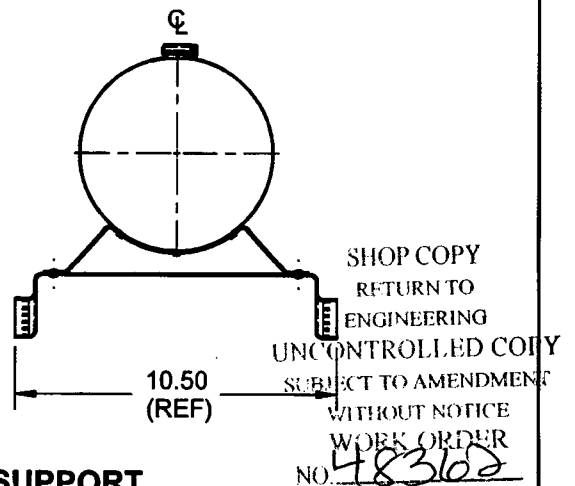
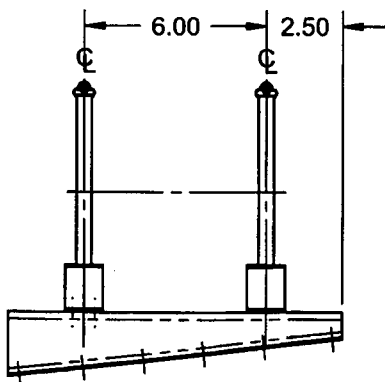
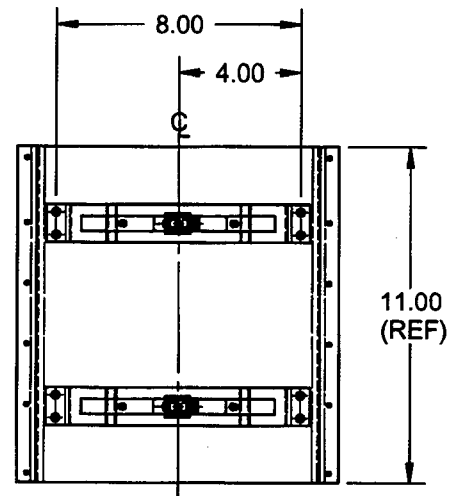
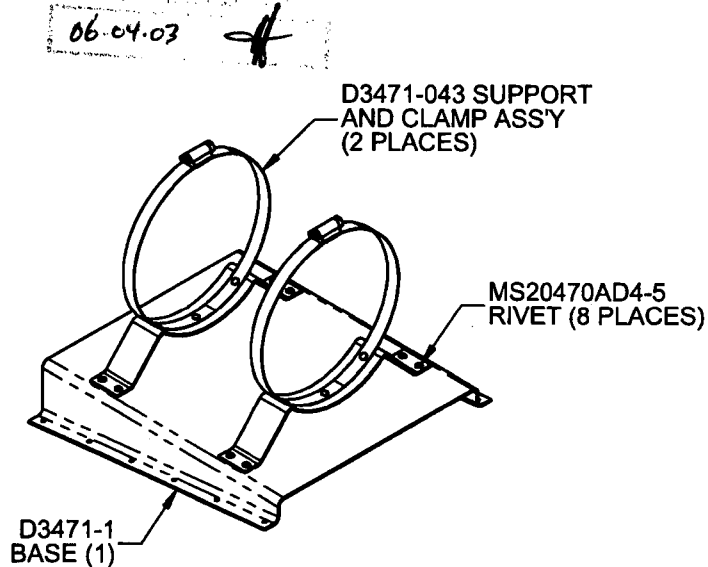
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3471	REV. A SHEET 1 OF 5
DATE 05.12.21		TITLE BLOWER MOTOR SUPPORT	SCALE 1:6
A	05.12.21	NEW ISSUE	



D3471-041 BLOWER MOTOR SUPPORT

NOTES:

- 1) IDENTIFY WITH DART P/N D3471-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3471-041	BLOWER MOTOR SUPPORT
2	D3471-043	SUPPORT AND CLAMP ASSEMBLY
1	D3471-1	BASE
8	MS20470AD4-5	RIVET

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3471	REV. A SHEET 2 OF 5
DATE 05.12.21		TITLE BLOWER MOTOR SUPPORT	SCALE 1:3

06.04.03 *[Signature]*

LOCATE AND TRANSFER DRILL
#30 ($\phi 0.129$) THRU HOLE FROM
D3471-3 TO MS35842-16 CLAMP
AND C'SINK $\phi 0.230 \times 100^\circ$
(3 PLACES)

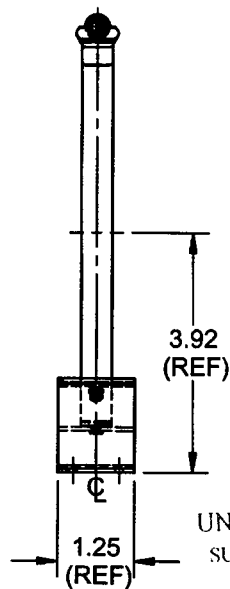
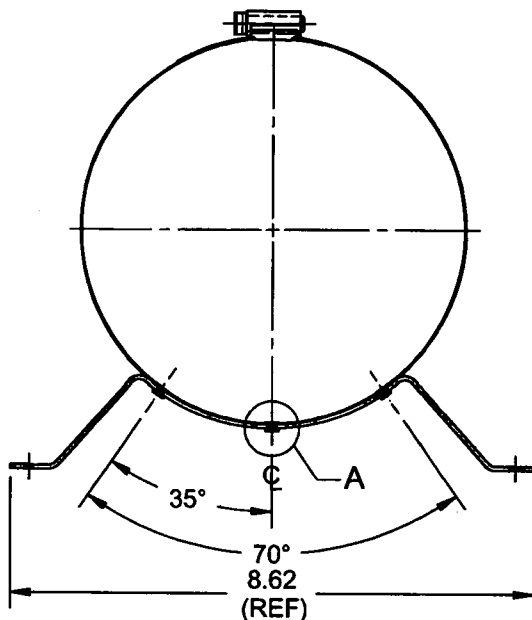


DETAIL A: COUNTERSINK HOLES
(RIVET NOT SHOWN FOR CLARITY)
SCALE 1:1

MS20427M4-4 RIVET
(3 PLACES)

MS35842-16
CLAMP

D3471-3
SUPPORT



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 48362

D3471-043 SUPPORT & CLAMP ASS'Y

NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010

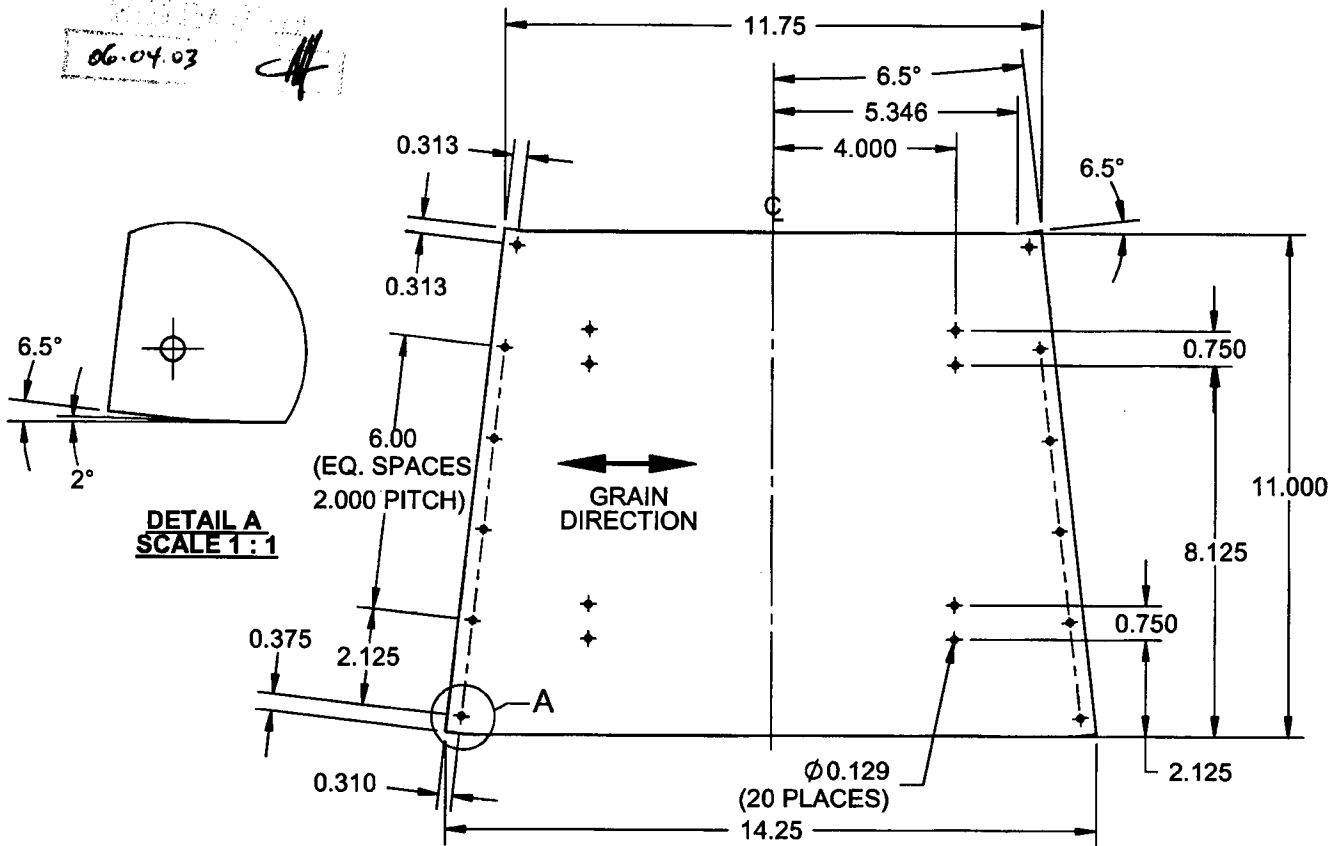
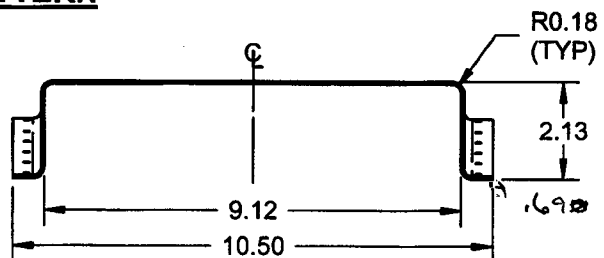
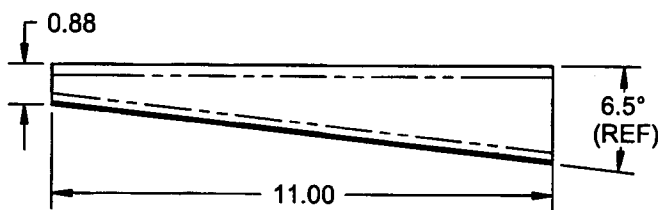
QTY -043	P/N	DESCRIPTION
X	D3471-043	SUPPORT AND CLAMP ASSEMBLY
1	D3471-3	SUPPORT
3	MS20427M-4	RIVET
1	MS35842-16	CLAMP

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3471	REV. A SHEET 3 OF 5
DATE 05.12.21		TITLE BLOWER MOTOR SUPPORT	SCALE 1:4

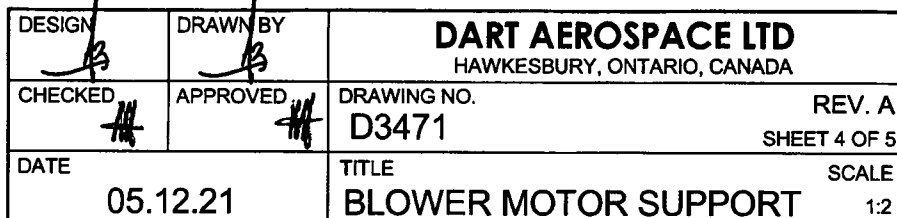
**D3471-1F BASE FLAT PATTERN****D3471-1 BASE BENDING DETAIL****NOTES:**

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET (0.063" THICK)
PER QQ-A-250/4 OR AMS 4037
(REF. DART SPEC. M2024T3S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 0054.1
- 3) PART IS SYMMETRICAL ABOUT CENTER LINE
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

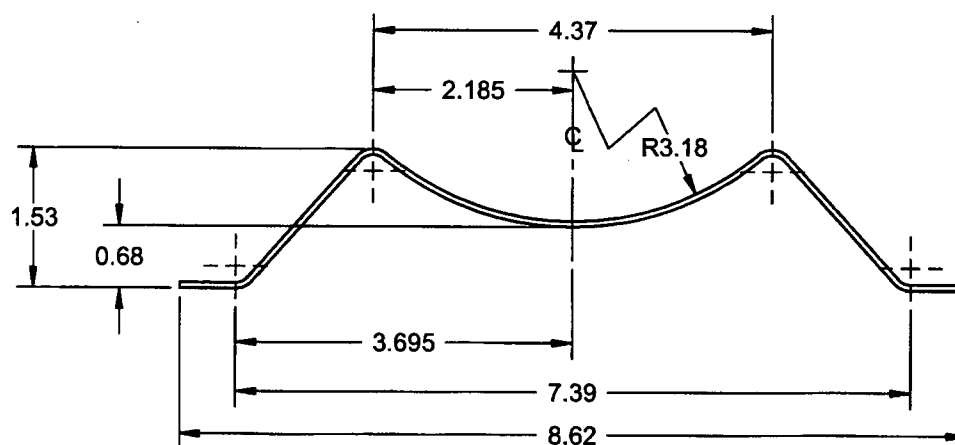
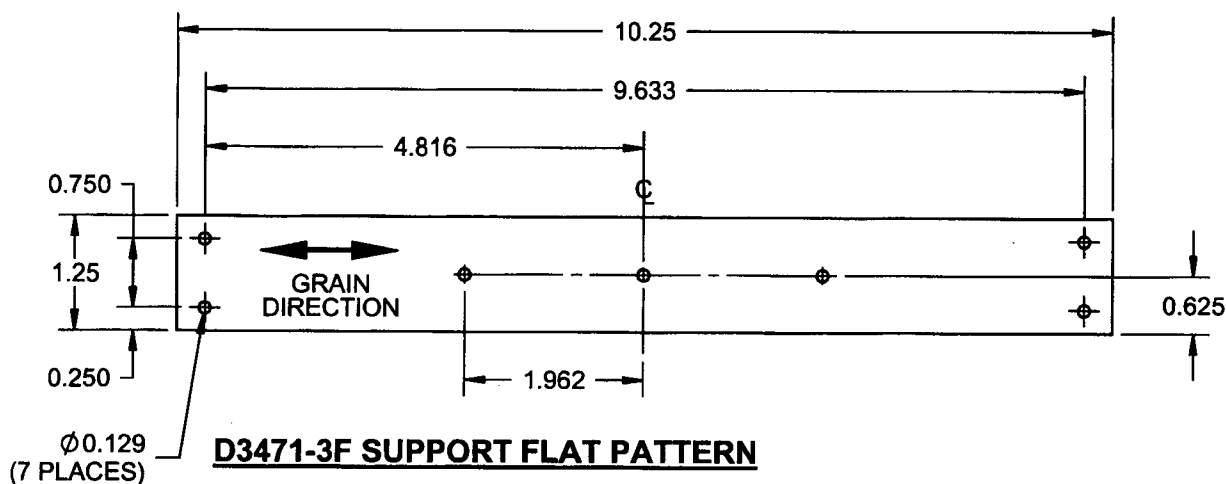
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *48362*

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



06.04.03



D3471-3 SUPPORT BENDING DETAIL

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET (0.063 THICK)
PER AMS-QQ-A-250/4 OR AMS 4037
(REF. DART SPEC. M2024T3S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 2) PART IS SYMETRICAL ABOUT CENTER LINE
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 48362

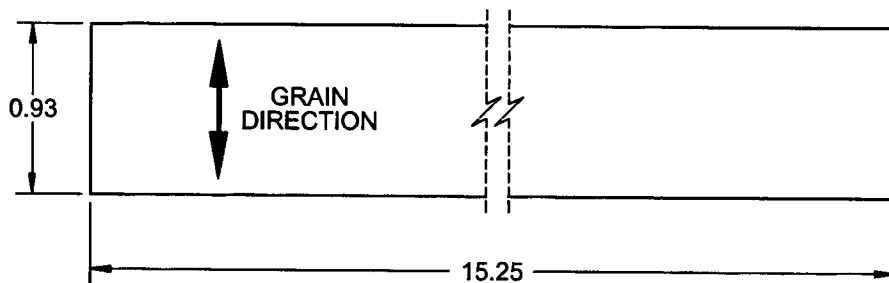
COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

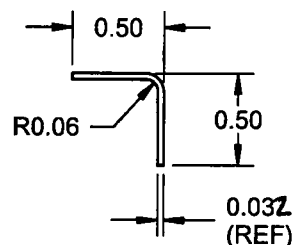


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3471	REV. A SHEET 5 OF 5
DATE 05.12.21		TITLE BLOWER MOTOR SUPPORT	SCALE 1:1

06.04.03 *[Signature]*



D3471-5F STIFFENER FLAT PATTERN



D3471-5 STIFFENER BENDING DETAIL

D3471-5 STIFFENER

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET (0.032" THICK)
PER QQ-A-250/4 OR AMS 4037
(REF. DART SPEC. M2024T3S.032)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *48362*

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.